

From qrp-1@lehigh.edu Mon Jun 5 13:06:08 1995
Message-Id: <9505058023.AA802368461@CCMAIL.AEROSYS.LORAL.COM>
From: "Bob White" <Bob_White@CCMAIL.AEROSYS.LORAL.COM>
Subject: 30 Meters
Date: Mon, 5 Jun 1995 09:06:08 EDT

I had a dream last night that I had walked into the family room, (where the ham shack takes up one corner), to pick up some papers which were germane to a project I had going on the kitchen table. Well while walking by the QRP Plus I cranked up the volume (it had been sitting all weekend on 10116 tuned into the 160 meter sky loop at 900 milliwatts with 0 reflected on the WM1), and just got the tail end of a CQ. I whipped out a quick DE W03B K. An immediate response was received of:

W03B DE #5%6QH RST 549 BT NAME JOHN BT QTH PERTH BT HW CPY BK
Gosh I never heard of Perth, CA. I sent a CALL ? BK and got back a VK6QH VK6QH BK . Then I pinched myself.....It was Real! Anyone else find some good band openings yesterday? This took place at 01:10 Z on 6/4.

While I am taking up bandwidth I have found the band to be pretty good from the east coast in the 00:30 to 03:00Z time slot in June. I have worked WI/900mw, TN/.300mw, IL/200mw, SD/900mw, OR/900mw, and Australia/900mw. My only other contacts on 30 this month are 11:30Z MA/900mw and 20:00Z MI/900mw.

72,
Bob White W03B WASTP(67.68W)
bob_white@ccmail.aerosys.loral.com

From qrp-1@lehigh.edu Mon Jun 5 17:32:58 1995
Message-Id: <Pine.3.89.9506051006.A3096-01000000@netcom18>
From: Alan Kaul <kaul@netcom.com>
Subject: Re: 30 Meters
Date: Mon, 5 Jun 1995 13:32:58 EDT

30M sounded great this weekend. But, I only worked one station (2xQRP Norman, Okla) despite hearing many JA's, VK's, ZL's, KP4XX, an OH2, a V31, and many USA call areas. The Los Angeles DX Packet Cluster had spots on Eastern Europe and former USSR as well. The band was hopping! But signal strengths were up and down with QSB and there was some QRN.

I run about 1.5W to an NN1G-SW30, and use the loaded center element of an A-3 Yagi at 40 feet as my antenna (it's about 35 feet long, so it is

about 3/8 wavelength, but resonates, (SWR 1.1 to 1) at 30M.
WWV reported the Solar Flux Index was about 79 when conditions on the
band sounded good. 'A' index was 8, 'K' was 2.

I'm probably going to put up a full quarter wave vertical (elevated with
radials) on 30M, to see how it works in comparison with my loaded dipole.
(My Norcal 40 seems to hear better, and have more QSO's using the quarter
wave vertical on 40.)

73.72 de Alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From qrp-1@lehigh.edu Mon Jun 5 13:57:43 1995
Message-Id: <9506051355.AA29056@us1rmc.bb.dec.com>
From: Bill Acito 05-Jun-1995 0955 <acito@asdg.enet.dec.com>
Subject: 30m
Date: Mon, 5 Jun 1995 09:57:43 EDT

"Bob White" <Bob_White@CCMAIL.AEROSYS.LORAL.COM> wrote...

"Then I pinched myself.....It was Real! Anyone else
find some good band openings yesterday?"

Mine was more study in frustration; last night on 20m (yes, 20,
not 30), heard a UA9 and a UAX calling CQ... several times...
unaswered... couldn't work 'em. But the bands were open.

b

. - I own my own words -

Bill Acito	d i g i t a l
acito@asdg.enet.dec.com	Digital Equipment Corporation
	Digital Semiconductor - Fab 6
	Hudson, MA

kc1gs
(qrp-ne #260, norcal #1147, arrl life)

From qrp-1@lehigh.edu Mon Jun 5 19:26:03 1995
Message-Id: <9506051921.AA19641@us1rmc.bb.dec.com>
From: Bill Acito 05-Jun-1995 1501 <acito@asdg.enet.dec.com>
Subject: 30m RFI, where should I look?
Date: Mon, 5 Jun 1995 15:26:03 EDT

I've been noticing some 'weird' behavior on my HW-9 on 30m.

I'm an apartment dweller. I use a B&W whip mounted on a second story window with a tuned counterpoise for each band hanging down and a tuner.

I'm getting quite a bit of RFI on 30m transmit (in a corded phone and amplified computer speakers, 1 room away) with as little as 1w of output power. The antenna is matched to +/- 1:1 SWR (i.e. I've used a MFJ-209 to get the antenna very close to matched by adjusting the counterpoise, and then tuning out the rest of the reactance with the tuner).

Using the same rig and antenna on 20m (with a different loading coil and counterpoise on the whip), I have no problems, even up to 5 watts. I also notice that I have to bring the drive up higher on 30m than 20m to get the same power out; this goes against the general trend of power out vs bands on the HW-9. My next step will be to compare my new QRP+ on 30m and 20m on the same antenna and see if I have a problem. Maybe a final filter value is off, or a re-tune is in order on the HW-9?

Anything else I should check? I'd like to join you guys on 30m, but I'm really ticking everybody else in the house off.

Additional tidbits: Wrapping the speakers power cable around a torroid form at the end closest to the speaker removes the noise. The noise sounds like modulated 60hz noise.

b

. - I own my own words -

Bill Acito
acito@asdg.enet.dec.com

|d|i|g|i|t|a|l|
Digital Equipment Corporation
Digital Semiconductor - Fab 6

Hudson, MA

kc1gs

(qrp-ne #260, norcal #1147, arrl life)

From qrp-1@lehigh.edu Mon Jun 5 20:41:03 1995
Message-Id: <n1409755796.65209@msmailgw1.arlut.utexas.edu>
From: "rohre" <rohre@arlut.utexas.edu>
Subject: RE: 30m RFI, where should I look?
Date: Mon, 5 Jun 1995 16:41:03 EDT

Sounds to me like you are getting some 30M energy rectified in the power supply diodes of the speaker amplifiers. I would just install the ferrites permanently on the speaker leads. and on the AC into the Ampl. On the phone, you could try that and audio bypasses caps, for RF on the line, ferrite core on the line, etc.

Is the phone powered other than by the phone line? If so, same treatment as the audio amplifier. Yes, do check that the 9 is tuned properly for 30M. Certainly, this is not an artifact of your antenna and counterpoise with a good match like you describe. If you can move the units that get interference, you might help decouple things.

Good Luck, and let us know what you find---a scope with a loop on small coax might help you sniff around the units getting the interference, look for peaks in the rf that may be on all the phone wiring. You might try a 0.001 disk cap across the red and green phone wires, in the outlet box.

--Stuart K5KVH
rohre@arlut.utexas.edu

From qrp-1@lehigh.edu Mon Jun 5 21:17:22 1995
Message-Id: <199506052116.QAA00746@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: 40M
Date: Mon, 5 Jun 1995 17:17:22 EDT

Gang,

I need to work some people and record (I know, QRN and all)

this week some QRP QSOs. They don't have to be long. This for the talk that I'm giving on Saturday.

So, if you're not busy from 9pm to 11pm CDT (let's see now, we move up one hour and we used to be 6 hrs different, so that makes it 0200-0400UCT (GMT, ZULU)) take a listen around 7.040MHz for some weak signal calling CQ, or you call CQ and see who you can get. We'll probably have thunderboomers again, but one's gotta do what one's gotta do.

Your chance to have you signal reproduced in front of a crowd of 100 or so individuals.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jun 5 21:43:50 1995
Message-Id: <199506052141.QAA00847@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: Re: 40M
Date: Mon, 5 Jun 1995 17:43:50 EDT

Ooops. That's Monday thru Thursday of this week gang.
Typos and missed information. Sorry. Haste makes waste.

Thanks Paul.

cc to the group

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jun 5 13:12:25 1995
Message-Id: <199506051311.JAA64048@nss1.CC.Lehigh.EDU>
From: DUPUYDL%PHYSICS%VMI@IST.VMI.EDU
Subject: <didn't bother with a subject>
Date: Mon, 5 Jun 1995 09:12:25 EDT

As a newcomer, I've got a question. Email me direct at

DAVIDDL%PHYSICS%VMI @ IST.VMI.EDU

(a) Anyone know where to buy an SB-1 mixer? (I have the designation wrong... SBL-1?)

(b) Anyone have any experience with Rick Cambell (QST, June 1992) direct conversion receiver? Where can one buy the pc board? Thanks, David AC4BN

From qrp-1@lehigh.edu Mon Jun 5 13:58:03 1995
Message-Id: <9506051351.AA28789@us1rmc.bb.dec.com>
From: Bill Acito 05-Jun-1995 0948 <acito@asdg.enet.dec.com>
Subject: <didn't bother with a subject>
Date: Mon, 5 Jun 1995 09:58:03 EDT

"Bob White" <Bob_White@CCMAIL.AEROSYS.LORAL.COM> wrote...

"Then I pinched myself.....It was Real! Anyone else
find some good band openings yesterday?"

Mine was more study in frustration; last night on 20m, heard
a UA9 and a UAX calling CQ... several times... unanswered...
couldn't work 'em. But the bands were open.

b

. - I own my own words -

Bill Acito	d i g i t a l
acito@asdg.enet.dec.com	Digital Equipment Corporation
	Digital Semiconductor - Fab 6
	Hudson, MA

kc1gs
(qrp-ne #260, norcal #1147, arrl life)

From qrp-1@lehigh.edu Mon Jun 5 19:22:31 1995
Message-Id: <9506051921.AA29844@comm1.ab.umd.edu>
From: "JOHN F. McCLUN" <JFM001@DENTAL3.AB.UMD.EDU>
Subject: Add-on to QRP list

Date: Mon, 5 Jun 1995 15:22:31 EDT

I have a suucinct interest in QRP. I would appreciate it if I could bet on the QRP-L list so that I would get the postings. Thank you.

I have an Ark-40, A&A 20M CW and a HW-7(Highly modified) as QRP rigs, in addition for a QRO I have an ICOM 730 (of course it too does duty in QRP form). Am subscribing to QRP Quarterly for information, as I plan on building a coherent CW station. If you know of anyone doing this, please have them drop me a line.
JFM001@dental3.ab.umd.edu - thanks again.

73
John

From qrp-l@lehigh.edu Tue Jun 6 06:32:00 1995
Message-Id: <950605233007_10872921@eWorld.com>
From: AlaskaJim@eworld.com
Subject: Alaska Ramblings 6-6-95 UTC
Date: Tue, 6 Jun 1995 02:32:00 EDT

Greetings from Alaska! My turn to post a bit of news/trivia.

Tonight I worked 2-way QRP with AA6AV at 0520-0534Z 6/6.
I spent 10 minutes trying for KE6JJJ on 7.109 from 0537-0547 6/6

What's it sound like up here? (I hear you all talking about the QRM)

At 0555Z 6/6 here is a band scan listing:

W7HOR CQ on 7033
NX6H CQ on 7044
a station on 7038,
one on 7004 and
a very weak one on 7016.

That is it. It would be interesting to find out what the stations are running for antennas. I think (underlined) AA6AV was using a G5RV.

I was running 4 watts to a G5RV at 37 feet.

6/5 UTC notes

I called CQ on 7039.9 for 0535-0545 with no answers.
kd6hvn de ke6csl on 7114 at 0547
ko6ez cq on 7046 but he sounded QRO.

NH6SV, Dave, at 0553 on 7040.2 but he never hears me. (Not the first time I tried to reach him.)

So excuse the bandwidth use, but I am having fun.

To all who responded about antennas.....

Thank you for your time. I am going to try for a Delta Loop centered on due East (That is on central Illinois from here). And if possible (will be very difficult) I will add a reflector. I hope the antenna beam width will cover the entire US. Any feedback on beam width?

Good night for now.

73,
Jim Larsen
AL7FS
Anchorage, Alaska

jllarsen@alascam.com

From qrp-1@lehigh.edu Tue Jun 6 02:43:58 1995
Message-Id: <95060522264158@sescva.esc.edu>
From: pcalcand@sescva.esc.edu (PETER CALCANDY)
Subject: Amps.
Date: Mon, 5 Jun 1995 22:43:58 EDT

Although most of my operating is done using a safe and practical 4 or 5 watts, there are times when I need a bit more. I am looking for information on an amp I can use with my argo 509 for those rare moments I feel the need to crank up the juice. I know Ten-Tec sold one a few years back. I have yet to find one. I have been on the lookout for a schematic or a kit which I can use. I know Ramsey makes a single band amp for about 50 dollars. I don't know of anyone who has made it however and their reputation is not good. If any of you boys or girls can help me, I would appreciate it.

2. The LONG ISLAND QRP HEAVY HITTERS and Limarc Jr. Ops. camping weekend was a success. The log will be posted here in a couple of days. For all those who have participated, we thank you!!!

3. The K2YEW/VK2IDU QRP poor man's DXpediton will take place from June 11th thru July 1. The hours and frequencies vary but Norm will be using 40, 30, 20, and 15 meters, both SSB and CW. He has also scheduled time on the Novice bands for those of you who cannot work him any place

else. Norm has also stated that no one should be embarrassed on CW. He will send one WPM to get you through the contact, if that becomes necessary.

For those of you who don't know Norm K2YEW, he has been promoting QRP operating at Ham conventions and club meetings for many years. He is also the founder and president for life of the LIMARC (Long Island Mobile Amateur Radio Club) QRP HEAVY HITTERS. He has also organized the Jr.OPs QRP camping weekends, which have become a semi-annual event, many years ago to give the young amateur the "Joy of QRP".

If you need the sked, please write to me at PCALCAND@SESCVA.ESC.EDU and I will send it back to you.

4. Finally, the next camping weekend for the LIMARC Jr. Ops will be sometime in September at Mongoup Lake in south central New York State. Stay tuned for details.

Regards and 72

Peter N2KPY

From qrp-1@lehigh.edu Mon Jun 5 20:17:24 1995

Message-Id: <n1409770044.56598@msmailgw1.arlut.utexas.edu>

From: "rohre" <rohre@arlut.utexas.edu>

Subject: RE: Antenna Help request from AL7FS

Date: Mon, 5 Jun 1995 16:17:24 EDT

Hi Jim!

Well the use of insulated wire like hook up wire would be OK to finagle thru the trees. Guess we should always put up ant. wire in winter, if a leafy tree, hi. Not an option for you I am sure. Well, I have a friend here who uses a delta loop with good results on 80M, with the horizontal part only about 7 feet off the ground, and the apex at about 60 ft. So 40 would be definitely doable in your case. My friend opens up the center of the bottom of his delta, and loads the thing on 160M, am not sure he won any contests this way; but it does get his on all bands, with some gain on the bands where it is a delta. He is feeding the top apex, as antennas work best to get that high current point up as high as possible, you know.

The only verticals I have ever heard of feeding with open wire have been end of 1/2 wave ones. Definitely should be elevated off ground; then you use a counterpoise wheel or four radials. One side of twin to vertical, other to radials. Need a Z match tuner for that, definitely. (Balanced tuner.) I have a Gap Titan all bands, (no tuning except out of the 100 kHz on 80M), which is fed as a vertical dipole, near the center. It is a long skip antenna, so would be great for your location too. It is ground independent, mounted 6 feet up a pipe, and has a counterpoise wheel. The elevated feed is the way to go I find.

I had an 18 AVT all band vertical with base feed, and it was elevated the same amount; but the Gap Titan runs all over it, (it is no longer up).

A coaxial inverted V would work on single bands in the trees, because it is insulated, but I gather you want more bands than one. The closer the angle is between the arms of the inverted V the more it functions like a vertical, ie low angle take off for DX. You could use RG 58, and have one for 80 and one for 40 at right angles. Have jumpers on the 40, to shorten it to 30M. They pretty much have omni patterns if the legs are close in angle. Now I have another friend who has played with these, but I have not, so can't speak to the real bandwidth.

I do not use a tuner if I can help it, using parallel dipoles, or multiband modified design G5RV, (a ZS6) further modified by my situation, where I had to run the ladder line off the 92 foot flat top, horizontally at right angles to a third tree; I needed 40 feet of ladder, and the dipole part was only 20 feet up!

Hope you can get something up to get a good sig down here. BTW, you should consider putting a reflector behind whatever antenna you use, to favor the US for your QRP pursuits. If you have two Deltas phased to U.S., that would be awesome. Did you know you can run a single half wave plus 5 % reflector wire behind an inverted V, and it will give some gain? Depends on your tree spacing, and orientation.

72, Stuart K5KVH

rohre@arlut.utexas.edu

From qrp-1@lehigh.edu Tue Jun 6 03:19:43 1995
Message-Id: <199506060303.WAA02857@vespucci.iquest.com>
From: femens@iquest.com
Subject: arp at Huntsville Alabama Hamfest?
Date: Mon, 5 Jun 1995 23:19:43 EDT

The Annual Huntsville (Alabama) Hamfest will be held this year on August 19 and 20. We've never had any QRP related activity in conjunction with the hamfest and I'm wondering if it is time to change that. I'm posting this to find out.

Is there is enough interest on the part of QRPers in the Southeast to make it worthwhile to organize something like a QRP Forum?

Assuming the support is there, is there anyone who'd be interested enough to grab the ball and make it happen?

If someone would like to try it, we can provide at least an hour

Forum

meeting room timeslot (2 hours if you need them) and a one table (8-foot) booth space somewhere near the other clubs and organizations for representation of something like ARCI or whatever.

There will be competition from a DX Banquet and the main Hamfest Banquet Saturday night, but there are lots of places around where we could set up a QRP get together and Schmoose session if the interest is there.

If you are not familiar with the Huntsville Hamfest, it is no hole and corner affair. Access the Huntsville Hampage at: "<http://iquest.com/~femens/hampage.html>" and click on the reference to Huntsville Hamfest to see what kind of operation we put together every year. We're not Dayton, but we're no slouch either.

If you'd like to see something like this happen and are interested in participating, let me know.

Frank Emens, W4HFU
femens@iquest.com

From qrp-l@lehigh.edu Mon Jun 5 14:53:31 1995
Message-Id: <950605105121_60596222@aol.com>
From: N5EM@aol.com
Subject: Re: Confessions of a Hardware....
Date: Mon, 5 Jun 1995 10:53:31 EDT

In a message dated 95-06-02 16:07:31 EDT, you write:

>Joking aside, it's true most of the people here spend more time
>on the list than on the air.

I am actually able to read my internet mail mostly at work between phone calls. At home, I try not to access it and devote my time to the bench and the rig. Balance, you know. Now, if I could only explain my concept of balance to the wife.

72

Ed

From qrp-1@lehigh.edu Tue Jun 6 02:22:09 1995
Message-Id: <199506060221.VAA01227@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: Data Input to Great Circle Codes
Date: Mon, 5 Jun 1995 22:22:09 EDT

I replied to the query that Alan had on input to programs and forgot to cc to qrp-1. Such is life.

In answer to why some programs want the lat/long data in degrees only and others want the input in the form of gc.c is dependent upon the whim of the programmer. Internally you convert from the dd.mm format to get floating point degrees and then do the calculations or you don't have to do conversion if you require the person using the program to do it for you.

It depends upon where you are getting your data from too. Sites like the geo server will give you degrees-minutes-seconds and you have to do some division by 60 and 3600 to get floating point degrees.

One of the things that I did with my US database was to convert it entirely to degrees then saved to files. It was then easier for me to write the program without fancy conversion routines.

One thing about inputting in degrees. You will have problem with things like 45.45N123.43E as the E will be treated as part of the exponent for a floating point number, so you have to do some character by character input.

All this notes on why the data is like it is. JB - just because.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jun 5 16:11:02 1995
Message-Id: <199506051609.LAA29672@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: Great Circle Bearings
Date: Mon, 5 Jun 1995 12:11:02 EDT

Gang,

For a long time, people have known that the world is round. Not exactly spherical, but close enough. I did a posting over one year ago to rec.amateur.misc in response to someone else's posting about accounting for the non-spherical geometry and I assure you that it isn't worth going the "extra mile". :-)

Anyway, back on track.

Let's see how you go about getting distance. I posted previously info about the geographical server, GEO@T5L.ADP.WISC.EDU, and sending message to same with name of town followed by state in subject line. Nothing in the body of the message. Later, and it is pretty quick, you will get back a message with something like the following (and I use Dallas, TX and San Carlos, CA as examples here).

For Dallas I get:

City: Dallas
County: 48085 Collin
State/Province: TX Texas
Nation: US United States
Feature: 45 Populated place
Postal Code(s): 75200

City: Dallas
County: 48113 Dallas
State/Province: TX Texas
Nation: US United States
Remark: county seat
Feature: 45 Populated place
Lat/Long: 32 47 00 N 96 48 00 W
Population (1980): 904078
Elevation: 463
Postal Code(s): 75201 75202 75203 75204 75205 75206 75207 75208 75209 75210
Postal Code(s): 75212 75214 75215 75216 75217 75218 75219 75220 75221 75222

Postal Code(s): 75224 75225 75226 75227 75228 75229 75230 75231 75232 75233
Postal Code(s): 75235 75236 75237 75238 75239 75240 75241 75242 75243 75244
Postal Code(s): 75246 75247 75248 75249 75250 75251 75252 75253 75258 75260
Postal Code(s): 75262 75263 75264 75265 75266 75270 75277 75283 75284 75285
Postal Code(s): 75287 75295 75303 75310 75313 75323 75326 75339 75346 75350
Postal Code(s): 75354 75355 75356 75359 75363 75364 75367 75368 75371 75373
Postal Code(s): 75376 75378 75379 75380 75381 75382 75387 75388 75389 75390
Postal Code(s): 75392 75393 75396 75397 75398

and for San Carlos I get:

City: San Carlos
County: 06081 San Mateo
State/Province: CA California
Nation: US United States
Feature: 45 Populated place
Lat/Long: 37 29 47 N 122 15 27 W
Postal Code(s): 94070

City: San Carlos
County: 06081 San Mateo
State/Province: CA California
Nation: US United States
Feature: 45 Populated place
Lat/Long: 37 30 26 N 122 15 34 W
Elevation: 76
Postal Code(s): 94070

I'm interested in the Lat/Long data, so I need to convert it to a form of dd.mmNdd.mmW and this is true of everything in the USofA. For DX, you have to find some other source of data. The format will become obvious later in this posting. dd is degrees and mm is minutes. You can add the seconds into the minutes by dividing the seconds by 60 and adding.

For Dallas we get one Lat/Long and this converts into 32.4700N96.4800W. For San Carlos we get two Lat/Long and I assume that one is for the geographical center and the other for the courthouse, but I'll do both to illustrate a point: 37.2978N122.1512W and 37.3043N122.1557W, showing that it only past the second decimal place in the minutes (watch it gang, I'm right here, 'cuz the decimal point above separates degrees from minutes). OK, now we have both points on the globe that we need.

NOTE: You can do the extra places in mm position of the format. So, when I divide 47 by 60 and get 0.78, I just append this to the 29 and get 2978 after the decimal point, thus the 37.2978N.

There is a program called gc.c which I have put on FTP.LEHIGH.EDU under pub/listserv/qrp-l/tools. This program was written by S.R. Sampson, N50WK, in November 1989 and I added a mod to output miles and km, since the original program only output the distance in nautical miles. The instructions are in the heading of the program, which obviously is written in C.

You can run the program remotely, thanks to Jim Eshleman for setting this up, by sending email to LISTSERV@LEHIGH.EDU with first line of body of message

```
RUN QRP-L X gc 32.4700N96.4800W 37.2978N122.1512W
```

and you will get back

Output from stdout:

```
Bearing is 290 Degrees for 1276 Nautical Miles = 1469 Miles = 2364 Km
```

and for

```
RUN QRP-L X gc 32.4700N96.4800W 37.3043N122.1557W
```

we get

```
Bearing is 290 Degrees for 1277 Nautical Miles = 1469 Miles = 2364 Km
```

and you can see that the small difference in Lat/Long doesn't effect the result all that much.

For the newbies to spherical geometry: if you look at the typical map, you'll see that N6KR, Wayne Burdick, who's QTH I used above and I are pretty close to being at the same Latitude. It looks like his heading is about 270 degrees, i.e. due West of me, but BZZZZTTT, wrong answer due to the spherical geometry involved. No big deal, as in no way am I going out to rotate the 80M long wire to get it exact. :-) :-)

I worked N6KR with 950 milliWatts, thus my Miles/Watt rating is $1,469\text{Mi}/0.95\text{W} = 1,546 \text{ Miles/Watt}$. This was for a NorCal 40a to NorCal 40a contact posted previously. Just to stop the discussion before it starts: 1. we don't account for the number of hops and the additional distance the signal really really traveled in 3D space and 2. we don't do long path.

OK, I think I got everything in order and I'm sure I'll hear from those who think otherwise. :-)

Permission is given to reproduce the above in newsletters etc. as long as it is intact and proper credit is given.

I'd like Ron to take the above and put in QQ as written with the "in order" paragraph taken out. :-) Subject to editorial changes to correct errors.

Note: you don't have to do the commands to listserv in upper case. Also, please use the correct address and don't post requests to this list. :-) It does make a difference whether something goes to listserv or qrp-l. But you knew that.

OK for the programming "staff" of qrp-l. You wanna automate the following,

1. Send email to callsign server and get back FCC info
2. Take FCC QTH and send email to geo and get lat/long
3. Convert lat/long to proper format
4. Do same for senders call
5. Return results with both calls and the distances.

Piece of cake, I'm sure. :-)

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-l@lehigh.edu Mon Jun 5 20:53:18 1995
Message-Id: <9506052052.AA09893@radium.Eng.Sun.COM>
From: Raymond.Anderson@eng.sun.com (Ray Anderson)
Subject: Re: Great Circle Bearings
Date: Mon, 5 Jun 1995 16:53:18 EDT

I'd like to thank K5FO for the great circle program he has made available both via the listserver and by way of source code on ftp.lehigh.edu .

For anyone who downloads gc.c.Z from the lehigh machine and wants to compile it, be aware that the compilation instructions at the top of the source code contain a minor typo that will cause compilation failure (at least under Solaris 2 and possible others).

the code say to compile: cc gc.c -lM

should be cc gc.c -lm

The C compiler on Sun workstations barfs on the capital M

72 de Ray WB6TPU
wb6tpu@radium.eng.sun.com

From qrp-1@lehigh.edu Mon Jun 5 21:22:10 1995
Message-Id: <Pine.BSI.3.91.950605171656.12189B-100000@pluto.njcc.com>
From: Michael Marmor <mmarmor@pluto.njcc.com>
Subject: Re: Great Circle Bearings
Date: Mon, 5 Jun 1995 17:22:10 EDT

Chuck,
Thanks for the pointer to the ARRL Operating Manual for distance and bearing equations. The equations are on page 4-4 of the 4th edition. I will cc this to qrp-1 to see if anyone else has any comments. I have written a short C program (source code below) that uses these equations but I am a little skeptical about the bearing calculation. Even though my program, the N50WK program (GC) and the K1TD program (gwbasic program found in the Operating Manual and on the inet) give almost identical bearing data. Here's why I'm skeptical....

I am located in Princeton, New Jersey (no, that's not reason enuf to be skeptical!) specifically:
40d 19m 02s North Latitude 74d 37m 13s West Longitude.
This translates to 40.3172N 74.6203W in decimal degrees. Los Angeles is given as 34.1N 118.2W (decimal degrees) in the Operating Manual. My program (and the others) give a distance of 2411.2 statute miles and a bearing of 273.9 degrees from true north. Huh? Can this bearing be correct. From Princeton New Jersey to Los Angeles is West and slightly *North*? Surely there must be a Southern component to the bearing from anywhere in NJ to LA! I would have guessed a bearing around 230 or so (and certainly somewhere between 180 and 270). Is there a math problem here or is LA really 273.9 degrees from true north? Perhaps a sign (+/-) problem for one of the trig functions?

OBQRP - As a project to help me learn to program in 'C' I thought I would try to write a program to calculate miles per watt from Lat/Lon data. I hope to use internet resources such as the callsign server and the geographic server *in real time* so that you would only have to type in a domestic callsign and your power level and the computer would return your miles per watt, other stations name, county etc....

73 Mike, AA2UJ

mmarmor@Pluto.njcc.com

Here is my simple program for finding bearing and distance.

```
-----
/*
  DISBEAR.C -- 6/5/95
  Find distance and bearing from latitude and longitude data.
  Equations are from ARRL Operating Manual, 4th Ed., page 4-4.
  Warning! I am learning how to program in C as I write this so as
  always Caveat Emptor!
  Michael Marmor, AA2UJ -- E-mail: mmarmor@pluto.njcc.com
*/

#include <stdio.h>
#include <math.h>

#define D_R 3.141592654/180 /* convert degrees to rads */
#define R_D 180/3.141592654 /* convert rads to degrees */

void main()
{
    float A, B, L, D, C, yourlong, hislong, cosc, cosd, miles;

    printf("\nDistance and bearing calculator.\n"
           "Uses equations from ARRL Operating Manual, "
           "4th ed, page 4-4.\n"
           "This program has NO features and NO WARRANTY! :-)\n\n"
           "Enter data using decimal notation.\n\n"
           "Example: AA2UJ shack in Princeton, NJ\n"
           "\t Latitude 40.3172\n\t Longitude 74.6203\n\n"
           "South latitude and East longitude must be entered as "
           "*negative* numbers.\n\n");

    printf("Enter your latitude using decimal notation: ");
    scanf("%f",&A);

    printf("Enter your longitude using decimal notation: ");
    scanf("%f",&yourlong);

    printf("\n\nEnter the latitude of target using decimal notation: ");
    scanf("%f",&B);

    printf("Enter the longitude of target using decimal notation: ");
    scanf("%f",&hislong);

    /* convert degrees to rads so trig functions don't puke */
```

```

A = A * D_R;
yourlong = yourlong * D_R;
B = B * D_R;
hislong = hislong * D_R;

/* The way cool math stuff for finding DISTANCE */
L = yourlong - hislong;

cosd = sin(A) * sin(B) + cos(A) * cos(B) * cos (L);

D = acos(cosd);

/* D is distance in radians of arc.  We want statute miles
   so we convert rads to degrees and multiply times a constant */

miles = D * R_D * 69.0826;

printf("\n\nDistance  %.1f statute miles.\n",miles);

/* The way cool math stuff for finding BEARING */

cosc = (sin(B) - sin(A) * cosd) / (cos(A) * sin(D));

/* C = acos(cosc); */
C = - atan( cosc / sqrt( 1 - cosc * cosc )) + 1.57079;

C = C * R_D;

if ( sin(L) < 0 )
    C = 360 - C;

printf("Bearing  %.1f degrees from true north.",C);
}

```

From qrp-1@lehigh.edu Mon Jun 5 22:42:07 1995
 Message-Id: <199506052240.PAA20313@mailhost.primenet.com>
 From: aa7qy@primenet.com (Roger Hightower)
 Subject: Re: Great Circle Bearings
 Date: Mon, 5 Jun 1995 18:42:07 EDT

Here's why I'm skeptical....

>

>I am located in Princeton, New Jersey (no, that's not reason enuf to
>be skeptical!) specifically:
>40d 19m 02s North Latitude 74d 37m 13s West Longitude.
>This translates to 40.3172N 74.6203W in decimal degrees. Los Angeles
>is given as 34.1N 118.2W (decimal degrees) in the Operating Manual.
>My program (and the others) give a distance of 2411.2 statute miles
>and a bearing of 273.9 degrees from true north. Huh? Can this bearing
>be correct. From Princeton New Jersey to Los Angeles is West and slightly
>*North*? Surely there must be a Southern component to the bearing from
>anywhere in NJ to LA! I would have guessed a bearing around
>230 or so (and certainly somewhere between 180 and 270). Is there a
>math problem here or is LA really 273.9 degrees from true north?
>Perhaps a sign (+/-) problem for one of the trig functions?

>

Good question. The definition of a "great circle" is a circle with its
<plane> passing through the center of the earth; because of this, any
great circle arc from a point North of the equator to another point North
of the equator will have an initial Northerly component. The final
component will be Southerly. In between will be various corrections due to
the fact that all compass references are to the equator....a "great circle"
course

is not a single line of bearing (except in rare cases mentioned
below)....you must make periodic corrections to get where you want to go.

The magnitude of the northerly component varies with the distance involved;
generally, the shorter the distance the smaller the initial northern
component. The 273.9 degrees from Princeton would get you off on the first
leg...if you stuck with it, you'd never get to L.A. The only time(s) you
can sail a great circle course with no change in bearing is along the
equator OR between two points that are on a longitude line...sorta
rare.

I don't have my Dutton's since a Doberman pup snacked on it, but think memory
will serve well enough.

72/73 and don't let it drive you up the wall.

Roger, AA7QY (LCDR, USN (Ret))

aa7qy@primenet.com rhigh@aztec.asu.edu Ham Radio: AA7QY@KC7Y.AZ.USA.NA

From qrp-1@lehigh.edu Mon Jun 5 23:00:50 1995

Message-Id: <Pine.3.89.9506051553.A17592-01000000@netcom8>

From: Alan Kaul <kaul@netcom.com>

Subject: Re: Great Circle Bearings
Date: Mon, 5 Jun 1995 19:00:50 EDT

Let me please inject a dumb question into the discussion about bearing calculations. There seems to be a disparity in how the calculations are set up.

When Chuck noted the posting of the program at 'tools' he specified the format of the program is DD(decimal)MM (where the decimal really means what follows is minutes expressed in minutes). But when Michael calculated, he obviously converted EVERYTHING AFTER THE DECIMAL TO TENTH-HUNDRED-THOUSANDS-ETC of a Degree.

In previous programs, I have always converted the degrees-minutes-seconds to be expressed in DEGREES --- out to 3-4 decimal places. I had presumed that to be true for the programs I have written in Basic for my old Commodore 64 (we're talking programs written 10-12 years ago!!).

My dumb question is: who is right-----is Chuck (i.e. does the program KNOW that everything after the decimal is expressed in MINUTES), or is Michael (i.e. does the program KNOW that everything after the decimal is expressed in DEGREES)???????

Inquiring minds want to know. Tnx and 73/72 (which is hard to express in DEGREES/MINUTES).

[<Alan Kaul, W6RCL>] kaul@netcom.com

From qrp-1@lehigh.edu Tue Jun 6 03:16:28 1995
Message-Id: <2fd3c468.ibbs1@ibbs1.com>
From: "CLAY WYNN" <ID0077@ibbs1.com>
Subject: GREAT CIRCLE BEARINGS
Date: Mon, 5 Jun 1995 23:16:28 EDT

Chuck,

I don't know if it is due to the ellipticity of the spheroid, or the sphericity of the ellipsoid, but there does seem to be a difference. Just for kicks I compared your answers from the gc.c program to Cheek's spreadsheet (your place to Wayne's place). The distance answer was close within 0.5 percent. Surprise, the azimuth error was over 5%. Like you say though, I guess this is good enough for us qrpers. Maybe it is those pentium processors again. ;-).
Or, maybe we should kick that C program into double precision? :-)

72/73,
C. C. (Clay) Wynn N4AOX

--

```
+-----+
+  From IBBS#1 Metro Chicago                               +
+  ADDRESS REPLIES TO ID0077@IBBS1.COM   (CLAY WYNN)       +
+-----+
```

From qrp-1@lehigh.edu Mon Jun 5 19:36:43 1995
Message-Id: <950605153156_87157369@aol.com>
From: N5EM@aol.com
Subject: Houston-Dallas Hamcom Travel
Date: Mon, 5 Jun 1995 15:36:43 EDT

To those Houston QRPers and ATVers:

I will be going up during the day Friday (leaving around 1 pm) and returning from Dallas on Sunday morning, leaving around 10:30 am to arrive around 3 PM in Houston. I will be leaving from my office at San Felipe and Voss.

Parking garage is available if you need to park your car for the weekend.

If near the Galleria area, I can pick you up (or if on the way out I45 North).

I have to drive because of my rather tight return parameters on Sunday and can take 3 others. If you are interested in either riding up, back or both, please drop me an Email note or call me at (713) 507-5770 (Work-Day), or at (713) 481-6801 (Home-Evenings, will return your call later).

I do not have much space if you need to transport large amounts of flea market fodder, or if you are planning to buy a couple of racks! For QRP size needs, arrangements will be made :-)

72,

Ed Manuel, N5EM
n5em@aol.com

ps - sorry to post this on the List because of its very wide geographic area, but there are QRPers in Houston I would not otherwise be able to contact.

Also, I will be on 146.52 simplex FM, and 28.345 Mhz. SSB during the drive.

From qrp-1@lehigh.edu Tue Jun 6 08:18:34 1995
Message-Id: <9506060813.AA22617@slugbt.zso.dec.com>
From: rehm@zso.dec.com
Subject: How to mount a vertical antenna on my roof?
Date: Tue, 6 Jun 1995 04:18:34 EDT

I've just purchased a Cushcraft R7 vertical (no flames please) for broader HF coverage than my 40m-20m loop (which doesn't work well when it's raining...the turning capacitor isn't water-proofed...)

I'm considering various ways to mount the R7 on my roof of my 1 story house.

I've never done this before. In previous homes, I strung dipoles and other wire antennas. I'd like the benefit of the wisdom of others how have roof-mounted their verticals.

Givens: The R7 requires 5'-8' clearance from the roof line, and 1.5"-1.75" mast. (1.25" TV mast is too small!) R7 weighs 12.3 lbs and is 22.5' tall.

So far: Bought the R7. Purchased a 6' length of 17 gauge 1.675" galvanized fence post. (This was recommended by Cushcraft.)

Here are the various options I've considered:

1. Roof peak mount - it has two trapezoidal flanges that are bolted to 4" piece of 1-1/2 tube.

- + Simple to mount on the roof.
- + Tilts too, so tuning adjustments are easier.
- Must find 1-1/2" mast. TV 1-1/4" mast is too small for the mount *and* the R7. My 6' piece of 1-5/8" fence post is too large.
- Mast must be guyed with non-metallic wire since the mount itself is a bit flimsy. Source for non-metallic guy wire?

2. Tripod mount

- + Sturdy
- + Can accomodate my 6' piece of 1-5/8" steel fence post.
- Lots of holes (and silicon caulk) in the roof.

- Lots of climbing around in the attic.
- Potential for a leaky roof.
- Not asthetically pleasing to anyone but a Ham.

3. Chimney mount

- + Can get the parts at Radio Shack. Easy to install.
- Must take it down when needed chimney repairs (at the very top / cap) are done.
- Will it put too much stress on my 49 year old chimney?

4. Vent Pipe Mount

- + Easy, cheap.
- Not sure that the vent pipe mount is strong enough for 6' of fence post + 22.5' of R7.
 - Not sure my vent pipe (either cast iron or glavanized steel) is strong enough, either.

5. Eve or Side of house mount

- + Cheap
- How do a find the studs from outside? (I have asbestos siding that's very brittle, so I *can't* go punching test holes with long thin nails into the side of the house.)
 - Would need a longer piece of mast to clear 5-8' above the roof.
- Least asthetically pleasing.

Right now, the tripod mount seems to make the most sense since it's the sturdiest. Any tips on mounting are welcome. One suggestion I've received from a co-worker is to make a "sandwich": bolt the tripod to a 2x4. The bolt then runs through the roof to a 2x6 mounted on the other side of the rafters. So the sandwich is the 2x4+rafters+2x6. White plumbing//hvac adhesive/sealant or silicon was recommend to be used in copious amounts. Any other suggestions? How should I treat the 2x4 that's on the outside?

How about any of the other methods? How else have people on qrp-l roof mounted their verticals?

dit-dit-dit dah-dah-dah dit-dit-dit,

/eric rehm
kj7ae
Seattle, WA

From qrp-l@lehigh.edu Tue Jun 6 08:26:00 1995
Message-Id: <9506060818.AA06415@slugbt.zso.dec.com>
From: rehm@zso.dec.com
Subject: How to turn off Digest mode?
Date: Tue, 6 Jun 1995 04:26:00 EDT

Recently, I sucessfully went to digest mode on QRP-L.
I simple sent the listserv the command

```
set qrp-l mail digest
```

This worked find, but then I changed my mind, so I tried:

```
set qrp-l mail nodigest
```

No dice. I had to unsubscribe and then resubscribe to
get back to "nodigest" mode. Is their an easier way?
(The HELP and HELP SET listserv commands didn't provide
any answers.)

/eric rehm
kj7ae
Seattle

From qrp-l@lehigh.edu Mon Jun 5 21:46:15 1995
Message-Id: <01HRCT3Q75GY9859UI@MAILSRV1.PCY.MCI.NET>
From: Bob Smith <rsmith@internetmci.com>
Subject: HP XXX(X) LX and inet access.
Date: Mon, 5 Jun 1995 17:46:15 EDT

-- [From: Bob Smith * EMC.Ver #b.2.5.02] --

Thanks for the messages Robert - I have amy 3rd LX. They are the best - I
even have been to the factory in Corvallis, OR. They are fabulous devices.

Question - How do you access inet mail with an LX?

----- REPLY, Original message follows -----

Date: Monday, 05-Jun-95 01:38 PM

From: Robert Finch \ Internet: (bfinch@asp.vet.purdue.edu)
To: QRP-L@LEHIGH.EDU \ Internet: (qrp-l@lehigh.edu)

Subject: try again....

wow what a response!.....

last month doug hendricks left a note about
the new norcal membership certificate, and
the response has been slow but steady

BUT friday's brief note about using a HP palmtop
on the throne EXCEEDED the response so far to the
certificate, and all IN one day (which must say
something about this net, but DON'T ask me what)

to save bandwidth, i didn't include the original
note i was replying to about the equipment
involved in reading e-mail on the throne, which
apparently had been discussed on some service at
MIT.....

i don't know what you think, but I am getting
responses from my note being posted on other lists,
and without my permission!, and i don't feel this is
ethical or appropriate!!.....i have been asked
only in one case...and to him i will give permission
ONLY if he includes this note along with my original

posting.....

as to whether i will do this again (reply without including the original note to save bandwidth) is in doubt.....i am disappointed in the lack of personal ownership of e-mail,.....gang; it is NOT o.k. to copy without permission, period. our society has always protected ownership of written thought thru copyright, which is now automatic. IT WOULD BE DIFFICULT TO CONVINCE ANYONE THAT I DIDN'T WRITE THE NOTE I QUESTION, JUST 'CAUSE IT DIDN'T SEE PAPER WHEN I CREATED IT DOESN'T MEAN I DON'T OWN IT.

since the response was so overwhelming i thought it best to reply to all of interest here, please excuse the 'use of bandwidth'

now about the hp palmtop, and where to get it:

i do not have any interest in the company i will write about below, but i got mine there, and it's your responsibility to deal with them, as I had some problems with my order, and it took them awhile

to get serious about it; on the other hand, they DID
get serious about it AND their price is excellent on
the two meg model (IMHO do not get the 1 meg model,
you WILL want more. i use mine for a phonebook, calendar,
appointment book, to-do lists, notetaker, word processor,
it holds my quicken files, AND of course is my internet
terminal on the road, and on the throne...hi, and 1 meg
for ms-dos, shells and ram-disk isn't enuf,...you can
get a gud price, i.e. well under 5 bills at service
merchandise and elsewhere)....so for the 'bigger'
version go to :

SUNSHINE COMPUTERS

Business: 800-828-2992 Tech:407-394-3742

Alternate:407-394-4180 Fax:407-750-4261

HP Dealer, Tech M-F 9-6 St 10-4

M-F 6A-8P, S 10A-6P, Sn N-5P ET

22191 Powerline Road, Suite 14B

Boca Raton FL 33433

my price a couple/three months ago was: a
HP2001x/2meg fer \$ 605 plus \$ 20 for two day ship.

the current price may well be considerably less!

one reader of my message asked about the new HP1000cx
....this is a 1 meg version for about 50 bucks or
so less than the 1 meg 2001x WITHOUT any software except
the op system (ms-dos 5.0).....IMHO this is no bargain
unless you OEM a specific market, and buy in serious
quantity....the software in the 2001x is just TOO good
not to pay the small additional cost (and this from
the original skin-flint).....

remember, you deal with sunshine at your own risk
(use a credit card for some protection), BUT the
good thing is the warrantee from HP, and their
extended one seems the cat's meow....it is a model
of what the computer industry should be doing IMHO

ttfn es 72.....baab, n6cxb

yesterday i posted the following the qrp-1@lehigh.edu:

abt. using the throne.....(and e-mail)
i use a hp palmtop to read the mail, and
my xyl notes how much time i spend sitting
in the small room.....

so i guess it's obvious now abt. where i
read the mail.....

if this appeals to u, and since someone ELSE
brought it up, i can let u know where to get
the 11.5 oz. hp palmtop really inexpensive

ttfn.....baab...n6cxb

----- REPLY, End of original message -----

From qrp-1@lehigh.edu Mon Jun 5 15:47:52 1995
Message-Id: <1995Jun05.114523-0400@[130.113.234.7]>
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
Subject: Re: K5FO MOSFETs: need info
Date: Mon, 5 Jun 1995 11:47:52 EDT

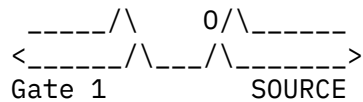
In <1995Jun03.200409.11843@wb3ffv.ampr.org>, Mike Czuhajewski wrote:
>I got some of those three-for-a-buck MOSFETs from K5FO when he was up
>here, but can't seem to find any info on them. ...[stuff deleted]...

Mike, your data books don't seem to go back far enough. try 1974

Gate 2 DRAIN

<-----\ / -----\ /----->
 \ / \ /
 | |
 Top view

Sorry, my ASCII art isn't
as good as the original, sent
to Chuck.



MPF131

plastic package....Dual gate depletion mode MOSFET RF amplifier with diode-protected gates (they should still be handled with anti-static precautions in mind). Designed for VHF amplifier.

Maximum ratings:

Voltage Drain-to-source25v DC

Drain Current30ma.

Total power dissipation @ ambient 25 degrees C...350 mW (hey, its QRP!)

Derate above 25 degrees C.....2.33mW/degree

Breakdown voltages Gate1-to-source and Gate2-to-source....+-7v min, +-20vmax

Gate 1-to-source cutoff voltage $V_{g1s(off)}$ -4.0v max

Gate 2-to-source cutoff voltage $V_{g2s(off)}$ -4.0v max

Gate 1 reverse leakage current,

Gate 2 reverse leakage current.(25 degrees C) I_{g1ss} , I_{g2ss} 20 nA max

Zero-gate-voltage Drain current I_{dss} 3.0ma min, 10ma typ, 30ma max.

Small signal characteristics:

Forward transfer Admittance (gate 1 connected to drain)

($V_{ds}=15v$, $V_{g2s}=4.0v$, $I_d=10ma$, 1Khz) Y_{fs} = 8mmho min, 20mmho max

Input Capacitance

($V_{ds}=15v$, $V_{g2s}=4.0v$, $I_d=I_{dss}$, 1Mhz) C_{iss} =4.5pf typ, 7.0pf max

Output Capacitance

($V_{ds}=15v$, $V_{g2s}=4.0v$, $I_d=I_{dss}$, 1Mhz) C_{oss} =2.5pf typ, 4.0pf max

Reverse Transfer Capacitance

($V_{ds}=15v$, $V_{g2s}=4.0v$, $I_d=I_{dss}$, 1Mhz) C_{rss} = .023pf typ, .05pf max

Common source noise figure

($V_{ds}=15v$, $V_{g2s}=4.0v$ $I_d=6.0ma$, Z_s optimized for noise)

@60 Mhz 2.5dB typ, 5dB max

@200 Mhz 3.0dB typ, 5dB max

Common source power gain

($V_{ds}=15v$, $V_{g2s}=4.0v$ $I_d=6.0ma$, Z_s optimized for noise)

@60Mhz 20dB min, 27dB typ

@200 Mhz 17dB min, 20dB typ

Level of unwanted signal for 1.0% cross modulation 100mV typ

Glen Leinweber VE3DNL leinwebe@mcmail.mcmaster.ca

From qrp-1@lehigh.edu Mon Jun 5 14:25:03 1995
Message-Id: <950605101853_60580195@aol.com>
From: PDouglas12@aol.com
Subject: Re: LC meter
Date: Mon, 5 Jun 1995 10:25:03 EDT

Hi LB and the group,
The circuit and program aren't mine to publish--they belong to 73 and the original author. My mods don't give me new rights, except to the mods! And no, I very much doubt that a PC could do what a lowly Commodore can do--They really made the C64 capable of amazing things, including a 2MHz freq counter, built-in. Amazing little machine, worth buying for 20 bucks at most flea markets. I have about three or four with disk drives in reserve, as they do fail. I have a number of old C64 mags (esoteric stuff like Transactor from Canada--and would like to fill in my collection of these) and old 73's have many very interesting progs for this machine. Why, for instance, anybody would pay big bucks for a CW keyboard, I don't know--these are a snap to implement on the C64--and either free if you have one of these gathering dust--or very cheap to pick up. And a suitable interface can be done with a handful of Radio Shack parts.
And for QRPers, the C64 can be made to run on 12v with a portable television for monitor for field day logging -- see the same 73 mag, July 90 for that one too. Incidentally, I could use a decent contest (field day) logger for the C64, as the one I have is inadequate.
Preston WJ2V

From qrp-1@lehigh.edu Tue Jun 6 08:31:44 1995
Message-Id: <9506060844.AA17618@asp.vet.purdue.edu>
From: bfinch@asp.vet.purdue.edu (Robert Finch)
Subject: lost mail
Date: Tue, 6 Jun 1995 04:31:44 EDT

if u sent me (ot the list) any mail needing my
reply or ?, please re-send to me DIRECTLY...
i installed a new modem and messed up (LONG
story but all is , or appears to be o.k. npow)
BUT i lost all of monday's mail.....
tnxs es ttfn....baab, n6cxb

From qrp-1@lehigh.edu Mon Jun 5 18:18:10 1995
Message-Id: <950605141647_60729201@aol.com>
From: JimN00CT@aol.com
Subject: n0oct/kp4.....
Date: Mon, 5 Jun 1995 14:18:10 EDT

Kings and Queens of the Airwaves:

I will be /KP4 until Friday. Will try to operate 20 and 40 meters. Hope to hear you on the air!

73 de N00CT/KP4 Jim

jimn0oct@aol.com

From qrp-1@lehigh.edu Mon Jun 5 20:46:46 1995
Message-Id: <199506052045.PAA00613@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: NorTex June 3rd Meeting
Date: Mon, 5 Jun 1995 16:46:46 EDT

Well, it was a relatively large crowd that showed up for the first Saturday meeting of the North Texas QRP Club (that sounds formal, but it's not).

Present were:

W2LQ Baity from Denton, just north of Dallas
K5KVH Stuart from Round Rock. Stuart is an active member of the qrp-1 group and he drove 3 hrs to get up for the meeting.
KK5NA Joe from Arlington (mid-cities area)
N5QXF Richard from FtWorth. I returned his NC 40a to him as I had it to peak and check the AGC. Nice job of assembly Richard. He too is a member of this group.
N5OSG Larry also of qrp-1.
K5JHP Bill from Richardson
NA5K Smitty, famous C programmer of qrp-1 fame. You know him for the program to produce list of subscribers to this list sorted by call areas.
KE4PC Mike, another qrp-1 member
W5WO Wayne from Richardson

K5FO Chuck

and last, but not least, Addison Haynie, Jr., no license yet. I think there may be some that I missed and were not on the signup sheet.

We had informal meeting with discussion of FD lead by Bill with plans made for location, rigs, batteries, antennas, and food. Looks like I'm going to miss a good one, but XE1-land is calling.

Then discussion of HamCom, which is next week in Arlington midway between Dallas-Ft Worth TX. Home of the Texas Ranger baseball team. The QRP ARCI will have four tables setup and members from the area will be manning the booth. I'm sure there will be some equipment for show and tell and for sell too. We plan on a display being put together by Doc, W5TB, and handouts for various clubs etc. Cam Hartford, QRP ARCI Contest Manager will be flying in from CA, as he does every year for this one, and will be on hand during the festivities. HamCom is one of the biggest, if not the biggest hamfest in the state of TX every year.

We then talked about some kits to put together and I'm sure we will announce those to this group as they progress. No previews yet gang. :-)

There was some show and tell with Mike bringing a homebrew wooden paddle, single lever keyer paddle, which looked real nice. Richard had the NC40a and I had the SWL-30 in its case from NN1G.

Then we adjourned for lunch to Dickey's BBQ for some of our famous Texas BBQ. So, counting lunch and all we went from 10 am to 1:30 pm.

One of the reasons for success of small clubs is these little get togethers to share reports of rigs, doings on the air, etc. It is good to meet people like Stuart that we see on the internet and meet on the air. Thanks for the effort that it took to come all the way up here and drive all the way back. THAT is dedication.

I probably left some stuff out and I apologize. I didn't take notes. I didn't realize there would be a quiz later. :-)

For information on how to get to the meeting place, send me email. We meet first Saturday of every month at 10am in North Dallas, just a couple blocks from the tollway and Beltline Rd.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jun 5 10:57:28 1995

Message-Id: <1995Jun05.065546.28041@wb3ffv.ampr.org>

From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)

Subject: Notes on S&S Eng./KA3ZOW

Date: Mon, 5 Jun 1995 06:57:28 EDT

Ran into Dick and Kathy of S&S Engineering yesterday at the Manassas, VA hamfest. (It's quite rare to attend a hamfest in the Washington/Baltimore region and NOT see them :-).) Dick said he hasn't checked his e-mail in quite some time, and probably won't get to it again for even longer. (I sent him a few messages a couple weeks apart about a month ago, and they all bounced, with "mailbox full" rejects.) Don't bother sending e-mail to him, as it will either be rejected or sit and sit and sit.... (I told him I was going to say this, and he told me to go ahead.)

As for the 40 meter version of their new TAC1 rig, the one with the rotary knob and digital display, he has been working long hours at his Day Job, with no relief in sight for a while, so design is pretty much at a standstill. Don't count on the 40M version being available for a while.

73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org

E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org

The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA

Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From qrp-1@lehigh.edu Mon Jun 5 21:23:55 1995

Message-Id: <9506052122.AA18045@ig1.att.att.com>

From: mvjfm@mvubr.att.com (James M Fitton 508 960 2577)

Subject: QRP Newsletter 72

Date: Mon, 5 Jun 1995 17:23:55 EDT

Please send any article of interest that you would like to share with the members of the "QRP Club of New England"

Send to:

k1lgq@dennis.mv.com

Our famed Newsletter editor Dennis, K1LGQ is now on e-mail,
and QRP-L for the first time ever.

QRP-NE needs articles the July issue of "72",
which is being composed as we speak.

Your input and comments sincerely appreciated.

Thanks.....

Jim, W1FMR

From qrp-l@lehigh.edu Tue Jun 6 01:18:53 1995
Message-Id: <01HRD0GBPPQS8WXA0A@nova.wright.edu>
From: NYOUNG@nova.wright.edu
Subject: QRP+ Mike
Date: Mon, 5 Jun 1995 21:18:53 EDT

Hey guys, the Ten Tec hand mic is an electret and
can be configured to suck juice out of your radio.
Maybe that's the easy way. (Ten Tec does have a desk
mike... my next drool and slobber after the tower....
and a brain brake from Vygotsky and ... really, I can't
say that. I'm always reading weird stuff about language
and writing... anyway, I'm gonna get the desk mike
when I get the tower up and stabilized.)

Maybe TenTec has what you want now?

73
Nils
WB8IJN &c

From qrp-l@lehigh.edu Mon Jun 5 14:40:45 1995
Message-Id: <01HRCC50PX028ZEADY@tntech.edu>
From: Jeff Gold <JMG@tntech.edu>
Subject: qrp+ Mike?

Date: Mon, 5 Jun 1995 10:40:45 EDT

Anybody who got the QRP+ from the group order.. did you get the mike?.. if not what did the bill say?

thanks

73

Jeff, AC4HF

From qrp-1@lehigh.edu Mon Jun 5 16:23:01 1995
Message-Id: <199506051621.JAA18360@mailhost.primenet.com>
From: aa7qy@primenet.com (Roger Hightower)
Subject: Re: qrp+ Mike?
Date: Mon, 5 Jun 1995 12:23:01 EDT

>Anybody who got the QRP+ from the group order.. did you get the
>mike?.. if not what did the bill say?

>

>thanks

>

>73

>

>Jeff, AC4HF

>

Hi Jeff. Got the rig, but no mike. The invoice said Back Order. I understand this has been a problem before....no idea when they will ship. 73, de Roger AA7QY

aa7qy@primenet.com rhhigh@aztec.asu.edu Ham Radio: AA7QY@KC7Y.AZ.USA.NA

From qrp-1@lehigh.edu Mon Jun 5 20:35:08 1995
Message-Id: <9506051949.AA05261@chronology.com>
From: dcscott@chronology.com (Dale C. Scott)
Subject: qrp+ Mike?
Date: Mon, 5 Jun 1995 16:35:08 EDT

Jeff,

Mine just showed up today. The invoice shows the mic as being back ordered and the dollar amount is for \$510 plus S&H. It appears that they didn't

charge us for the microphone.

73's

Dale

>Anybody who got the QRP+ from the group order.. did you get the
>mike?... if not what did the bill say?

>

>thanks

>

>73

>

>Jeff, AC4HF

>

>

>

```

  --\      /
-----\  / Dale C. Scott          EMAIL: dcscott@chronology.com
-----\ /  CHRONOLOGY CORPORATION  TEL: (206)869-4227 x110
-----\ /  8405 165th Avenue NE    TEL: (800)800-6494 x110
----/   \  Redmond, WA 98052        FAX: (206)869-4229
- /-----\

```

From qrp-l@lehigh.edu Tue Jun 6 01:23:04 1995
Message-Id: <199506060123.SAA21157@bud.indirect.com>
From: Richard Kendrick Jr <rrrk@indirect.com>
Subject: Re: qrp+ Mike?
Date: Mon, 5 Jun 1995 21:23:04 EDT

The microphones are on back order because Index Labs wants to supply molded right angle connectors instead of straight ones. The mics he ordered came in straight instead and he is trying to find someone who can mold the connectors properly. He said something about stress on the pc board with straight connectors. He did say that Icom HM65 or MFJ 285W microphones would work fine. I'm however, still waiting for my radio

to arrive.

72/73, Richard

From qrp-1@lehigh.edu Mon Jun 5 13:31:15 1995
Message-Id: <950605092946.202c9226@carib.vf.mmc.com>
From: JEVERHART@cayman.vf.mmc.com
Subject: RE: Re Bowick RF book
Date: Mon, 5 Jun 1995 09:31:15 EDT

Mike C and the qrp list:

Mike C. WA8MCQ wrote:

> As requested, here is info on ordering the Bowick book. (That's the
> book I mentioned in passing in the review of the W7ZOI book in the
> April 95 QRP Quarterly.) The name is RF Circuit Design by Chris
> Bowick, priced at \$24.00 (plus whatever shipping/handling they charge),
> catalog # HS-1, and you order it from:
>
> Crestone Engineering
> 5910 S. University Blvd
> Bldg C-18 #360
> Littleton, CO 80121
> voice 303-770-4709
> fax 303-721-1021
>
> And according to the ad they take VISA, Master Card, and they even take
> American Express :-). This isn't the only place you can get the book,
> of course, but it's the only one I could find on short notice; I knew
> there was someone advertising regularly in RF Design magazine who
> carried it. (RF Design is a trade journal, and the editor is a
> ham...K9AY, Gary Breed.) I have no ties of any sort to Crestone
> Engineering, don't work for them, don't have any 401K money invested,
> etc.

My buddy Tony, WA3CA0 told me of several other sources for this excellent book:

Hosfelt at 1-800-524-6464 (toll-free)
Jameco at 1-800-871-4242 (toll-free)

and directly from Howard W. Sams publishing at 1-317-298-5400 (not toll-free).

The book was used for an RF design course here at work wehn it first went out of print! `Apparently ther was so much demand that Sams decided to re-print. Try it, you'll like it.

As usual,, I have no pecuniary interest in the book ar any of its suppliers.

72/73,

Joe E. N2CX

From qrp-1@lehigh.edu Tue Jun 6 05:44:53 1995
Message-Id: <06JUN95.01814833.0025.MUSIC@MARISTB.MARIST.EDU>
From: "Bowes, Fr. Bruce" <GBB1@MARISTB.MARIST.EDU>
Subject: Solar Flux
Date: Tue, 6 Jun 1995 01:44:53 EDT

Is there an internet address where you can get daily Solar Flux information?

I'm not always at the radio at 18 minutes after the hour.

Tnx

Fr Bowes

From qrp-1@lehigh.edu Mon Jun 5 17:38:14 1995
Message-Id: <9506051750.AA17186@asp.vet.purdue.edu>
From: bfinch@asp.vet.purdue.edu (Robert Finch)
Subject: try again....
Date: Mon, 5 Jun 1995 13:38:14 EDT

wow what a response!.....

last month doug hendricks left a note about

the new norcal membership certificate, and

the response has been slow but steady

BUT friday's brief note about using a HP palmtop on the throne EXCEEDED the response so far to the certificate, and all IN one day (which must say something about this net, but DON'T ask me what)

to save bandwidth, i didn't include the original note i was replying to about the equipment involved in reading e-mail on the throne, which apparently had been discussed on some service at MIT.....

i don't know what you think, but I am getting responses from my note being posted on other lists, and without my permission!, and i don't feel this is ethical or appropriate!!.....i have been asked only in one case...and to him i will give permission ONLY if he includes this note along with my original posting.....

as to whether i will do this again (reply without including the original note to save bandwidth) is in doubt.....i am disappointed in the lack of personal ownership of e-mail,.....gang; it is NOT o.k. to

copy without permission, period. our society has
always protected ownership of written thought thru
copyright, which is now automatic. IT WOULD BE
DIFFICULT TO CONVINCE ANYONE THAT I DIDN'T WRITE
THE NOTE I QUESTION, JUST 'CAUSE IT DIDN'T SEE PAPER
WHEN I CREATED IT DOESN'T MEAN I DON'T OWN IT.

since the response was so overwhelming i thought
it best to reply to all of interest here, please
excuse the 'use of bandwidth'

now about the hp palmtop, and where to get it:

i do not have any interest in the company i will
write about below, but i got mine there, and it's
your responsibility to deal with them, as I had
some problems with my order, and it took them awhile
to get serious about it; on the other hand, they DID
get serious about it AND their price is excellent on
the two meg model (IMHO do not get the 1 meg model,
you WILL want more. i use mine for a phonebook, calendar,
appointment book, to-do lists, notetaker, word processor,
it holds my quicken files, AND of course is my internet

terminal on the road, and on the throne...hi, and 1 meg
for ms-dos, shells and ram-disk isn't enuf,...you can
get a gud price, i.e. well under 5 bills at service
merchandise and elsewhere)....so for the 'bigger'
version go to :

SUNSHINE COMPUTERS

Business: 800-828-2992 Tech:407-394-3742

Alternate:407-394-4180 Fax:407-750-4261

HP Dealer, Tech M-F 9-6 St 10-4

M-F 6A-8P, S 10A-6P, Sn N-5P ET

22191 Powerline Road, Suite 14B

Boca Raton FL 33433

my price a couple/three months ago was: a
HP2001x/2meg fer \$ 605 plus \$ 20 for two day ship.

the current price may well be considerably less!

one reader of my message asked about the new HP1000cx
.....this is a 1 meg version for about 50 bucks or
so less than the 1 meg 2001x WITHOUT any software except
the op system (ms-dos 5.0).....IMHO this is no bargain
unless you OEM a specific market, and buy in serious

quantity....the software in the 2001x is just TOO good
not the pay the small additional cost (and this from
the original skin-flint).....

remember, you deal with sunshine at your own risk
(use a credit card for some protection), BUT the
good thing is the warrantee from HP, and their
extended one seems the cat's meow....it is a model
of what the computer industry should be doing IMHO

ttfn es 72.....baab, n6cxb

yesterday i posted the following the qrp-1@lehigh.edu:

abt. using the throne.....(and e-mail)
i use a hp palmtop to read the mail, and
my xyl notes how much time i spend sitting
in the small room.....

so i guess it's obvious now abt. where i
read the mail.....

if this appeals to u, and since someone ELSE

brought it up, i can let u know where to get
the 11.5 oz. hp palmtop really inexpensive

ttfn.....baab...n6cxb

From qrp-1@lehigh.edu Mon Jun 5 15:03:26 1995
Message-Id: <01HRCC5VAGZS8ZEADY@tnitech.edu>
From: Jeff Gold <JMG@tnitech.edu>
Subject: Whitebrook paddles
Date: Mon, 5 Jun 1995 11:03:26 EDT

All,

Got my Whitebrook paddles, don't remember who posted info.. but pretty accurate.. about \$1.00 worth of parts.. but to me worth the \$10.00. I rubberbanded it and a very small Curtis Keyer with battery to the top of my Argosy II. Works very well (of course before I did this I had to add some washers to get the feel of the paddles the way I like).

Was just messing around.. called CQ once on 30 meters.. ended up with a nice long QS0. Going to be great for Mobile and portable.

73

Jeff, AC4HF